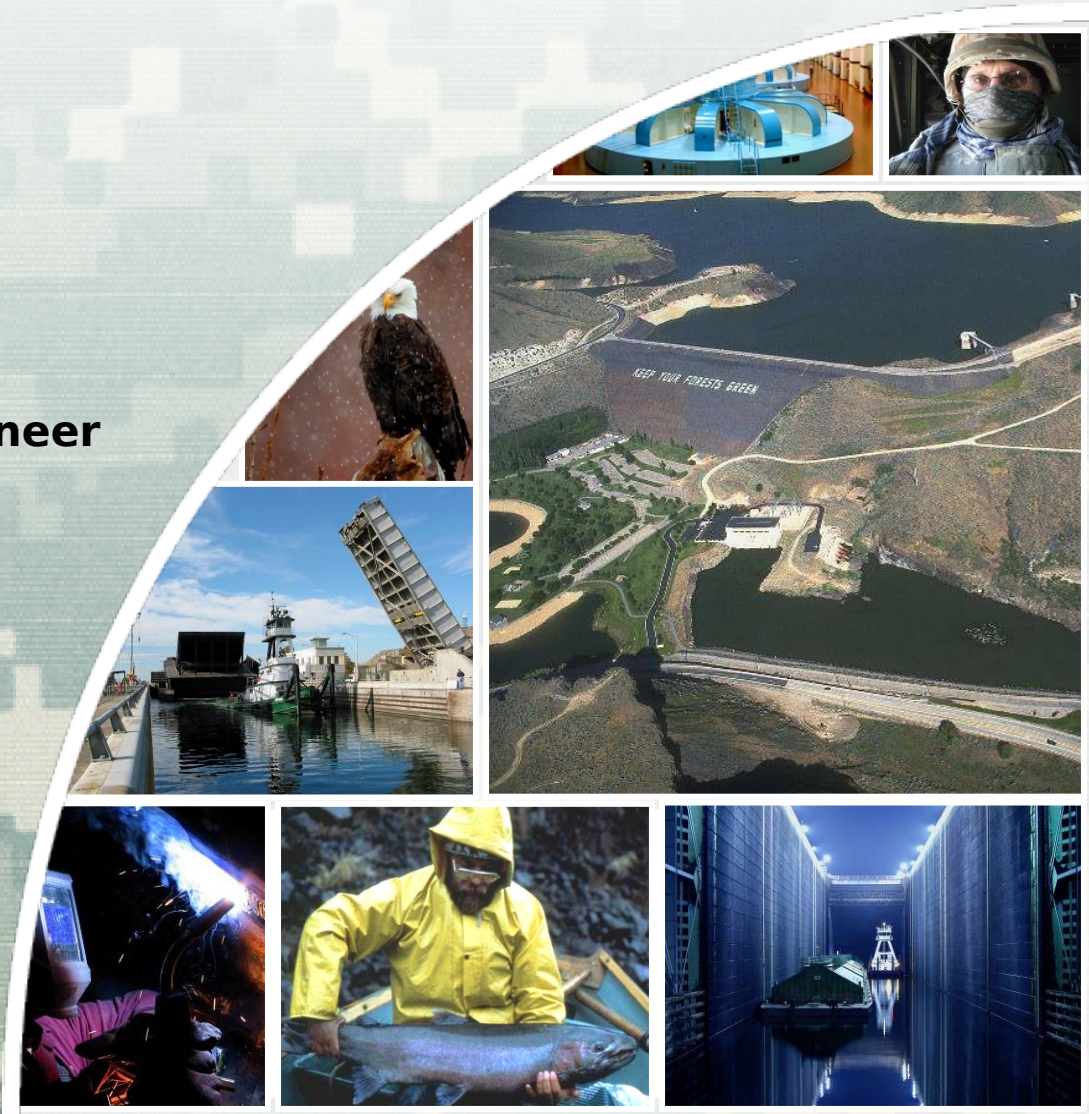
McNary Juvenile Fish Emergency Bypass System

July, 2011

Ryan Laughery – Hydraulic Engineer



US Army Corps of Engineers
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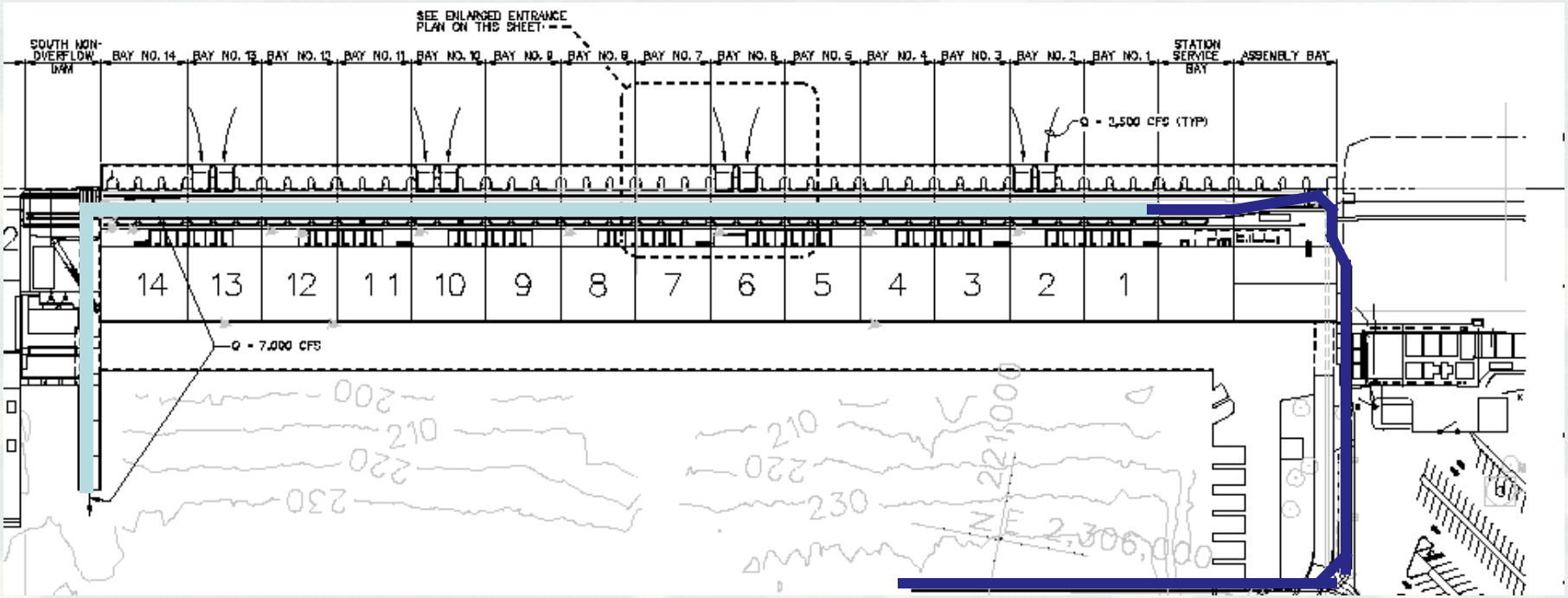
Location of Channel



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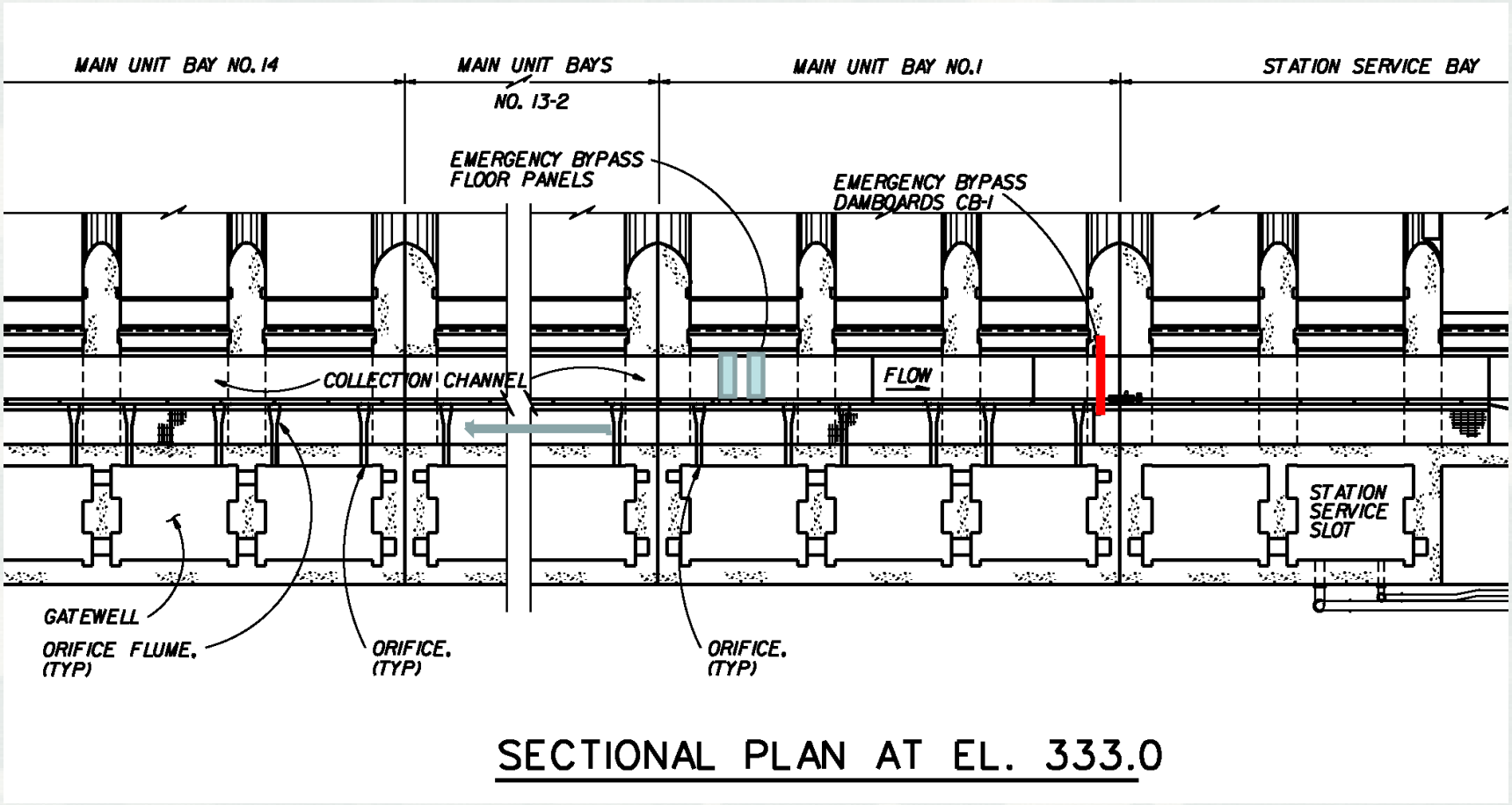
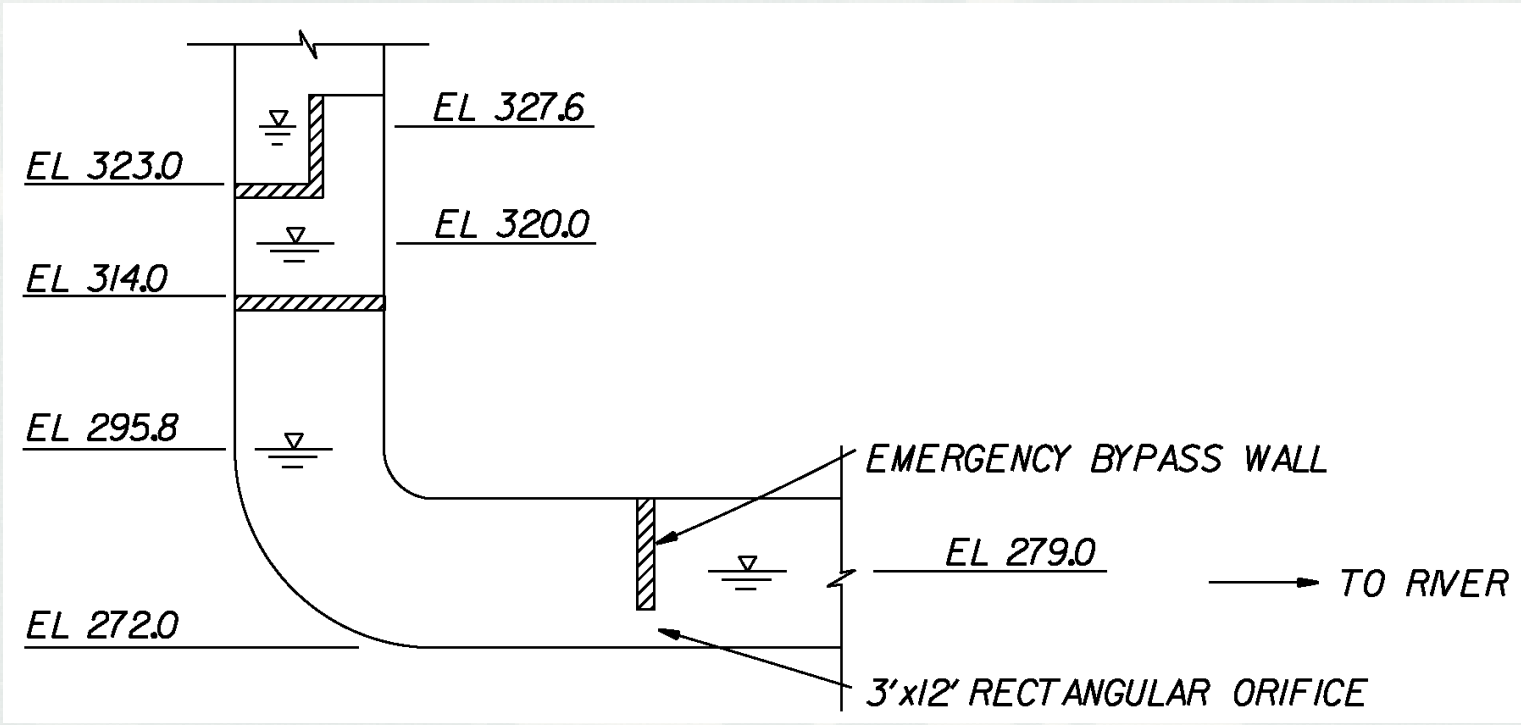
Section of Bypass System

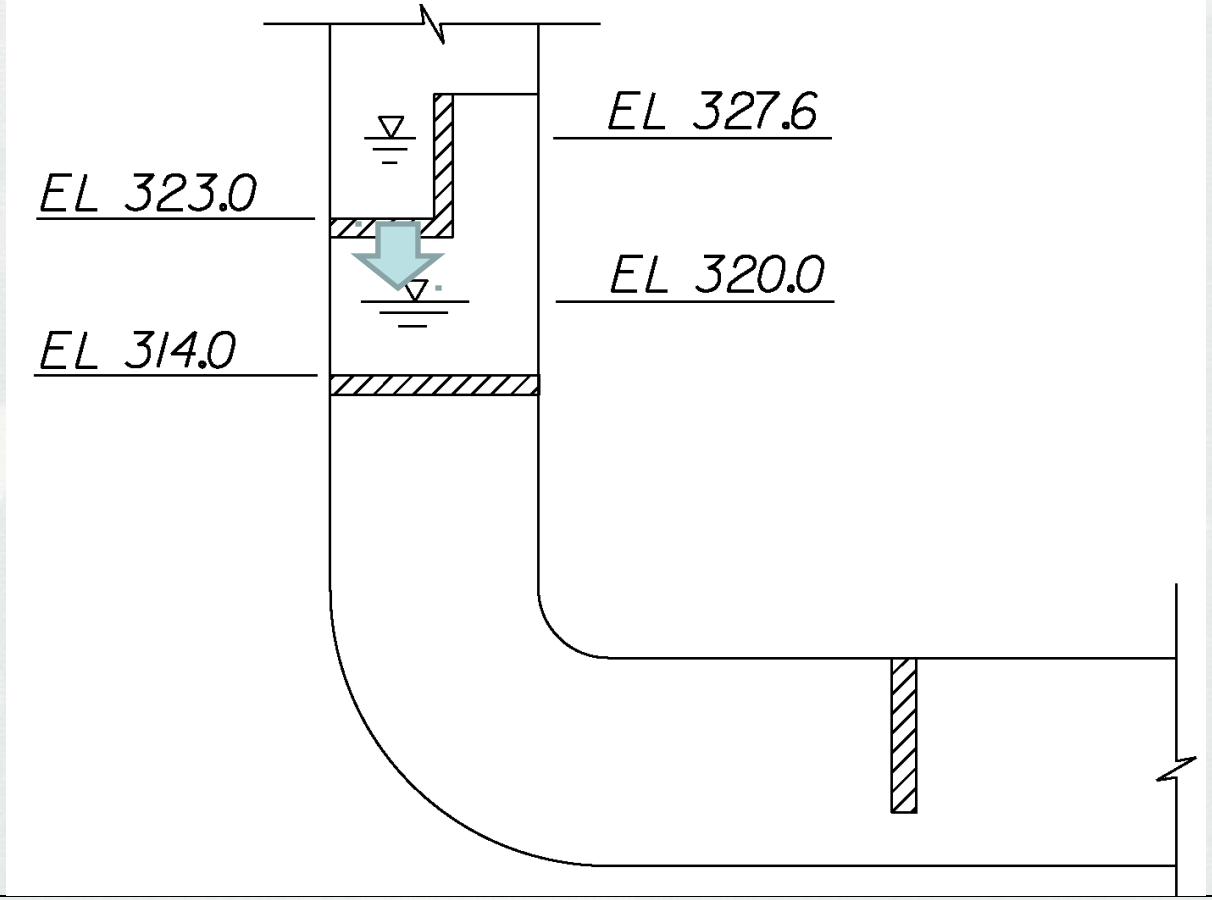


Section of Bypass System



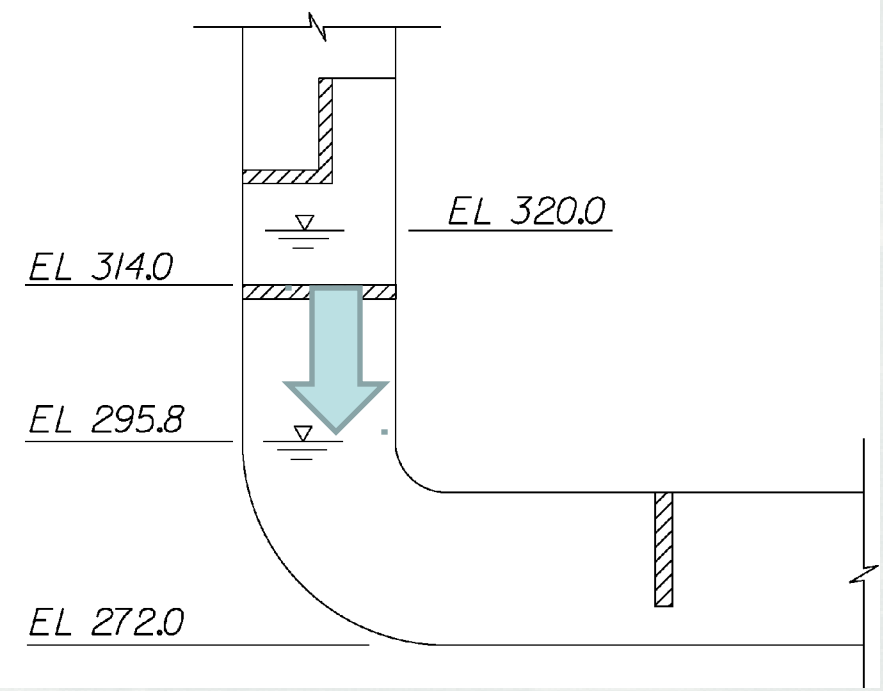
Entrance to Sluiceway

- 5-6 ft deep and 5 to 6.5 fps



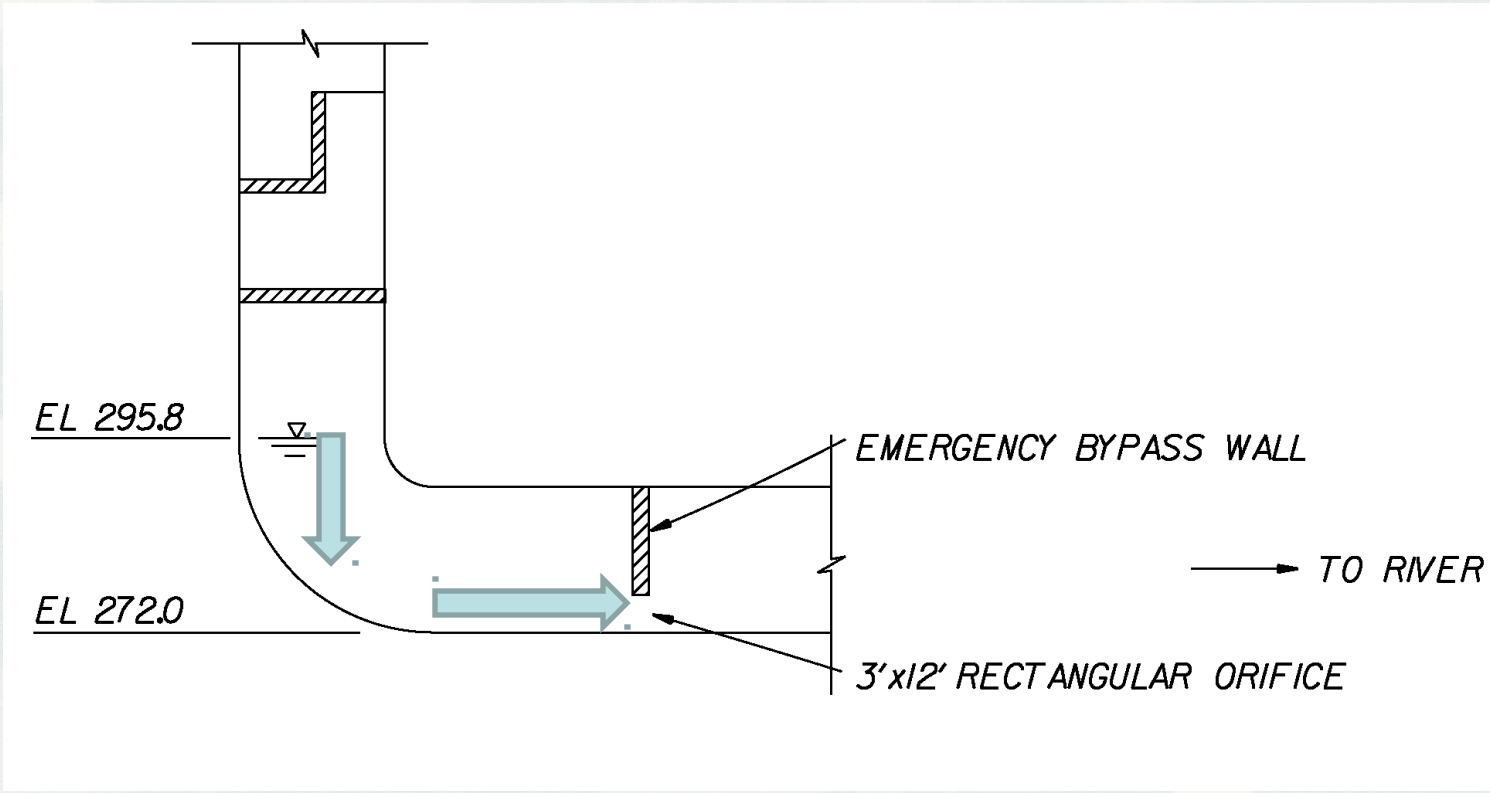
Sluiceway to Downwell

- Over Weir to Downwell 24 ft to 11 ft drop
- Plunge depth of 24 ft to 36 ft



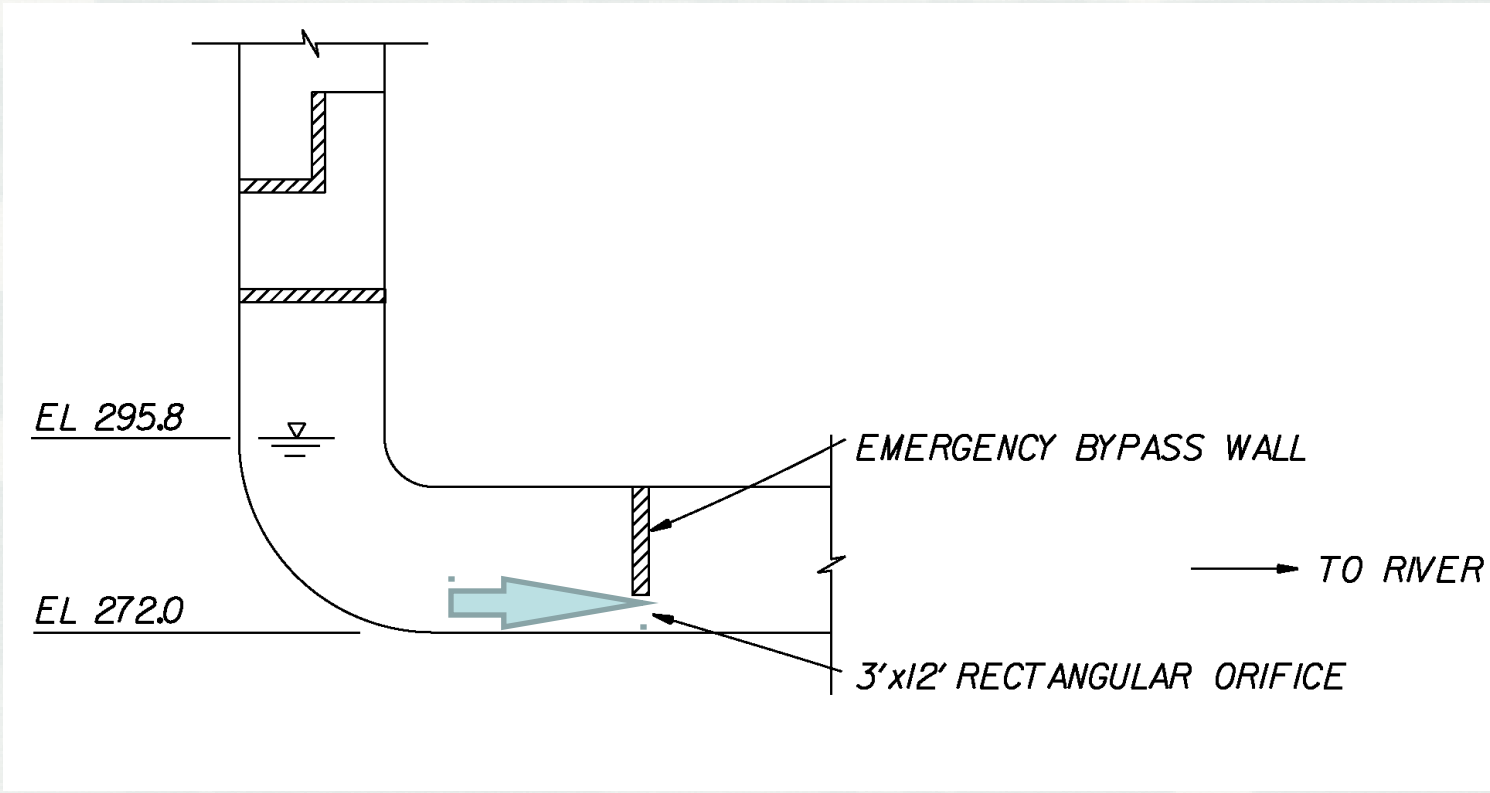
Plunge Pool in Downwell

- Vertical Velocity of 1.2 to 2 fps



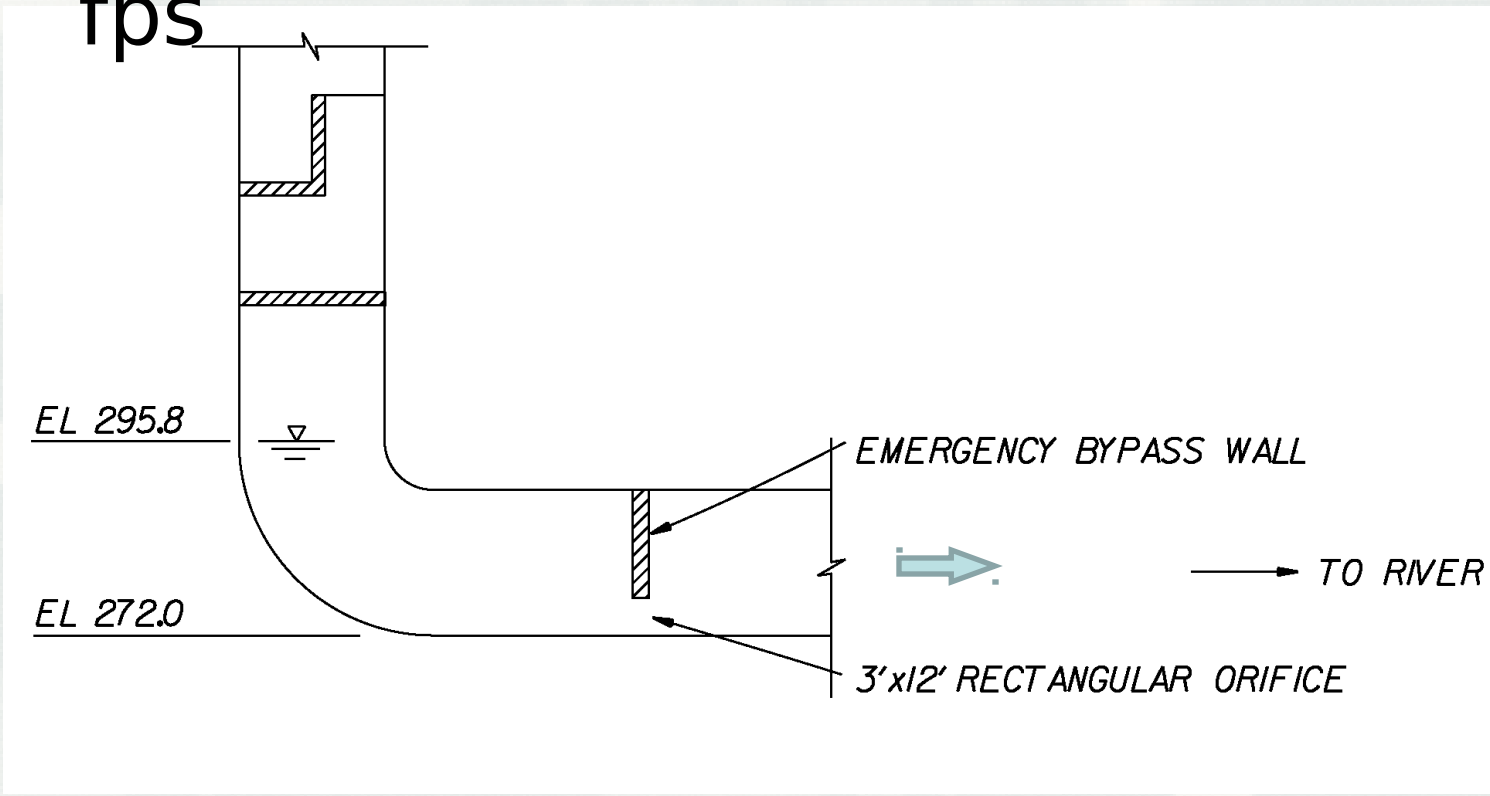
Orifice

- Velocity of 12 to 18 fps



Chute to Tailrace

- 300 ft long 21 ft wide flow at 3 to 4 fps



Enter The Tailrace

- Final step is a 8 to 15 ft drop to the tailrace